

# **WAFER WITH A RELAXED USEFUL LAYER AND METHOD OF FORMING THE WAFER**

## **ABSTRACT**

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A process for forming a useful layer (6) from a wafer (10), the wafer (10) comprising a supporting substrate (1) and a strained layer (2) that are chosen respectively from crystalline materials. The process includes a first step of forming a region of perturbation (3) in the supporting substrate (1) at a defined depth by creating structural  
10 perturbations that cause at least relative relaxation of the elastic strains in the strained layer (2). A second step of supplying energy causes at least relative relaxation of the elastic strains in the strained layer (2). A portion of the wafer (10) is removed from the opposite side from the relaxed strained layer (2'), the useful layer (6) being the remaining portion of the wafer (10). The present invention also relates to an application of the process and to wafers  
15 produced during the process.